



Know Before You Go!

E-10 Gasoline and Your Marine Engine

Today's gasoline which can contain up to 10% ethanol is commonly known as "E-10." Some older model fiberglass fuel tanks in boats may not have been manufactured to be compatible with E-10. Fiberglass softening and tank leakage are possible. With any fuel system, if you suspect a leak, you should fix it immediately.

Boats with older fiberglass tanks have suffered engine damage due to fiberglass resin compounds carried through the fuel filters into the engine and deposited on intake valves. If in doubt about your tank's compatibility, contact the manufacturer.

E-10 gasoline has been used in the Midwestern United States for over a decade. Experienced Midwest boaters and the BoatUS Foundation share these suggestions:

~If your fuel system has a build-up of contaminants, E-10 may act as a solvent, remove the contaminants from your fuel tanks and fuel lines and carry them into the fuel filter. Keep spare filters on your vessel, so if a filter becomes clogged while you are at sea, it can be replaced. As contaminants are removed from your fuel system, this problem should subside;

~It is critical that water be prevented from mixing with E-10 to avoid phase separation. Once phase separation occurs, fuel stabilizers or water separators will not reverse it. At this point, the only remedy is to have the gas and ethanol/water professionally removed from the tank. Using the remaining gasoline is not recommended.

~When storing your boat, add fuel stabilizer and fill your tanks to about 95% capacity to leave room for expansion. Phase separation typically occurs when boats are stored with tanks only 1/4 - 1/2 full.

~The increased oxygen in E-10 "enleans" the air/fuel ratio leading to more complete combustion and reduced emissions. The air/fuel ratio may need to be adjusted on engines without automatic controls.

For more information, visit the DLNR/DOBOR web page on safe handling of fuel aboard your vessel at www.hawaii.gov/dlnr/dbor/e10gas.htm.

If you have used E-10 gasoline in your marine engine and have an opinion on this blended fuel, please send your comments to Clifford.G.Inn@hawaii.gov or call (808) 587-1972.